

Application Number 10/670,780
Amendment dated June 3, 2005
Reply to Office action of March 25, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) An apparatus for displaying a dynamic parameter of an aircraft, said apparatus comprising:
 - a processing unit receiving a selected display algorithm signal and a reading of said dynamic parameter, said processing unit determining a display signal; and
 - a display unit receiving said display signal and displaying a scale that changes dynamically and non-linearly in accordance with the selected display algorithm, said display unit further displaying a pointer pointing to said scale in accordance with said reading of said dynamic parameter, thereby emphasizing a range of said reading of said dynamic parameter.
2. (original) The apparatus as claimed in claim 1, further wherein said scale comprises a vertical portion displayed vertically by said display unit.
3. (original) The apparatus as claimed in claim 2, wherein said dynamic parameter comprises the speed of said aircraft.
4. (original) The apparatus as claimed in claim 3, wherein said display unit displays said pointer with said speed of said aircraft.
5. (original) The apparatus as claimed in claim 4, wherein said scale, displayed by said display unit, is extended between a low speed value

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and a high speed value, further wherein a plurality of corresponding speed values are displayed adjacently to said scale by said display unit.

6. (original) The apparatus as claimed in claim 3, further comprising a user interface providing said selected display algorithm signal.
7. (original) The apparatus as claimed in claim 4, wherein said display unit further displays an adjacent bar to said scale, said adjacent bar comprising a first end corresponding to said speed of the aircraft and a variable end corresponding, on said scale, to a future speed to be reached by said aircraft if a current variation of said speed is maintained during a predetermined amount of time.
8. (original) The apparatus as claimed in claim 7, wherein said display unit further displays a value indicative of said variation of said speed.
9. (original) The apparatus as claimed in claim 7, wherein said predetermined amount of time is 10 seconds.
10. (original) The apparatus as claimed in claim 2, wherein said dynamic parameter comprises the altitude of said aircraft; further wherein an altitude reference signal is further provided to said processing unit, further wherein said processing unit determines said display signal using said altitude reference signal.
11. (original) The apparatus as claimed in claim 10, wherein said display unit displays said pointer with said altitude of said aircraft.
12. (original) The apparatus as claimed in claim 11, wherein said scale, displayed by said display unit, is extended between a reference altitude

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level value, corresponding to said altitude reference signal, and a high altitude value, further wherein a plurality of corresponding altitude values are displayed, by said display unit, adjacently to said scale.

13. (original) The apparatus as claimed in claim 10, further comprising a user interface providing said selected display algorithm signal and said altitude reference signal.
14. (original) The apparatus as claimed in claim 10, wherein said display unit further displays an adjacent bar to said scale, said adjacent bar comprising a first end corresponding to said altitude of said aircraft and a variable end corresponding, on said scale, to a future altitude to be reached by said aircraft if a current variation of said altitude is maintained during a predetermined amount of time.
15. (original) The apparatus as claimed in claim 14, wherein said display unit further displays a value indicative of said variation of said altitude.
16. (original) The apparatus as claimed in claim 15, wherein said predetermined amount of time is 60 seconds.
17. (original) The apparatus as claimed in claim 1, wherein said scale, displayed by said display unit, is extended between a low dynamic parameter value and a high dynamic parameter value, further wherein a plurality of corresponding dynamic parameter values are displayed adjacently to said scale by said display unit.
18. (original) A method for displaying a dynamic parameter of an aircraft, said method comprising:
providing a reading of said dynamic parameter;

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generating a scale that changes dynamically and non-linearly using said provided reading of said dynamic parameter and a selected display algorithm signal, and a pointer pointing to said scale in accordance with said reading of said dynamic parameter of said aircraft; and displaying said scale with said pointer thereby emphasizing a range of said reading of said dynamic parameter.

19. (original) The method as claimed in claim 18, further comprising generating a plurality of corresponding dynamic parameter values, corresponding to said scale, further comprising displaying said plurality of corresponding dynamic parameter values adjacently to said scale.
20. (original) The method as claimed in claim 18, further comprising selecting said selected display algorithm signal from a plurality of non-linear display algorithms.
21. (original) The method as claimed in claim 20, wherein said plurality of non-linear display algorithms comprise a geometric-based algorithm, an exponential-based algorithm, a logarithm-based algorithm or the like.
22. (original) The method as claimed in claim 18, wherein said generating of said scale is performed using said provided reading of said dynamic parameter and more than one selected display algorithm signal, each of the more than one selected display algorithm signal being used for generating a corresponding part of said scale.
23. (original) The method as claimed in claim 18, further comprising generating an adjacent bar, said adjacent bar comprising a first end corresponding to said dynamic parameter of said aircraft and a variable end corresponding to a future dynamic parameter value of said aircraft, if

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a current variation of said dynamic parameter is maintained during a predetermined amount of time, further comprising displaying said adjacent bar adjacently to said scale.

24. (original) The method as claimed in claim 23, wherein said displaying of said adjacent bar further comprises displaying a value of said current variation of said dynamic parameter.
25. (original) The method as claimed in claim 18, wherein said dynamic parameter comprises at least one of altitude, speed, rotations per minutes (RPM), oil pressure, oil temperature, engine temperature, fuel flow, tachometer and remaining fuel.
26. (original) An apparatus for displaying a dynamic parameter of an aircraft, said apparatus comprising:
a display unit receiving a display signal and displaying a scale that changes dynamically and non-linearly in accordance with a selected display algorithm, said display unit further displaying a pointer pointing to said scale in accordance with a reading of said dynamic parameter, thereby emphasizing a range of said reading of said dynamic parameter.
27. (original) The apparatus as claimed in claim 26, wherein said scale, displayed by said display unit, is extended between a low dynamic parameter value and a high dynamic parameter value, further wherein a plurality of corresponding dynamic parameter values are displayed adjacently to said scale by said display unit.
28. (new) An apparatus for displaying a dynamic parameter of an aircraft, said apparatus comprising:

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a processing unit receiving a selected display algorithm signal and a reading of said dynamic parameter, said processing unit determining a display signal; and
a display unit receiving said display signal and displaying a scale having scale ends, said scale changing dynamically and non-linearly in accordance with the selected display algorithm together with a minimum dynamic parameter value and a maximum dynamic parameter value, said display unit further displaying a pointer pointing to said scale in accordance with said reading of said dynamic parameter, such that said selected display algorithm constantly and exactly fits said reading, and the minimum and maximum dynamic parameter values to said scale, thereby emphasizing a range of said reading of said dynamic parameter while keeping said minimum and said maximum dynamic parameter values constantly and in view at respective scale ends.

29. (new) A method for displaying a dynamic parameter of an aircraft, said method comprising:
providing a reading of said dynamic parameter;
generating a scale having scale ends, said scale changing dynamically and non-linearly using said provided reading of said dynamic parameter and a selected display algorithm signal together with a minimum dynamic parameter value and a maximum dynamic parameter value, and a pointer pointing to said scale in accordance with said reading of said dynamic parameter of said aircraft; and
displaying said scale, said minimum dynamic parameter value and said maximum dynamic parameter value, such that said selected display algorithm constantly and exactly fits said reading, and the minimum and maximum dynamic parameter values to said scale, thereby emphasizing a range of said reading of said dynamic parameter

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while keeping said minimum and said maximum dynamic parameter values constant and in view at respective scale ends.

30. (new) An apparatus for displaying a dynamic parameter of an aircraft, said apparatus comprising:

a display unit receiving a display signal and displaying a scale having scale ends, said scale changing dynamically and non-linearly, such that a selected algorithm constantly and exactly fits a reading, a minimum dynamic parameter value and a maximum dynamic parameter value, said display unit further displaying a pointer pointing to said scale in accordance with said reading of said dynamic parameter, thereby emphasizing a range of said reading of said dynamic parameter while keeping said minimum and said maximum parameter value constant and in view at respective scale ends.

31. (new) An apparatus for displaying a dynamic parameter of an aircraft, said apparatus comprising:

a processing unit receiving a selected display algorithm signal and a reading of said dynamic parameter, said processing unit determining a display signal; and

a display unit receiving said display signal and displaying a scale that changes dynamically and non-linearly in accordance with the selected display algorithm.